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Philip Giudice, Commissioner
Commonwealth of Massachusetts
Department of Energy Resources
100 Cambridge Street, Suite 1000
Boston, MA 02114

Dear Commissioner Giudice:

RE: COMMENTS ON THE PROPOSED ALTERNATIVE PORTFOLIO STANDARD REGULATIONS

Summary: Trigen encourages the Department to design the APS to maximize its encouragement of combined heat and power facilities due to their ability to deliver the greatest energy efficiency and climate change benefits for the ratepayer dollar.

1. Introduction

These Comments are submitted on behalf of Trigen-Boston Energy Corporation ("Trigen"), a subsidiary of Veolia Environnement ("Veolia"). Trigen owns and operates the district heating system in Boston and is interested in the potential for new combined heat and power ("CHP") facilities that would take advantage of the thermal load of Trigen's existing heating and cooling customers and help reduce the carbon footprint of the Boston metropolitan area. Veolia is a global environmental company that stands first or second in the world in clean water, environmental services, transportation and energy services, with 300,000 employees and annual revenue of $48 billion. Veolia's global operations are estimated to have achieved annual CO_2 reductions of 5 million tons through renewable energy installations and energy efficiency improvements, including combined heat and power.

2. Benefits of Combined Heat and Power

The General Court is to be commended for the Green Communities Act and - in particular - the Alternative Energy Portfolio Standard (the "APS"). Trigen is pleased that CHP was one of only five technologies specifically included by name in the APS. CHP facilities can be as much as two to three times as efficient as a central station electric power facility, reducing equivalent comparative emissions by 1/3 to 1/2. Accordingly, CHP has been widely recognized as an energy resource/technology that may deliver among the greatest "bangs for the buck" among all greenhouse gas ("GHG") emission reducing technologies. Just to name two, I would direct the Department to (i) the December, 2007, McKinsey Report on "U.S. Greenhouse Gas Emissions: How Much at What Cost?", which can be located at the following link: http://www.mckinsey.com/clientservice/ccsi/greenhousegas.asp, which includes both commercial and industrial CHP among those GHG abatement resources that have a "negative marginal cost", i.e., those GHG reduction options that have the potential to generate positive economic returns over their useful lives; and (ii) the 2004 State of Maine's Climate Action Plan, located at the following link: http://www.state.me.us/dep/air/greenhouse/, which found CHP to be the single most cost effective GHG reduction option among the 55 strategies studied.

As McKinsey pointed out in its Report, merely being theoretically cost effective has not been sufficient to drive the deployment of many negative marginal cost abatement strategies, including energy efficiency measures such as CHP. Rather, institutional barriers need to be overcome. The APS is a great example of a measure that has been promulgated to help overcome such institutional barriers

3. Specific Recommendations

Given CHP's widely recognized climate change value and its need for institutional incentives, Trigen urges the Department to implement the APS to provide CHP with the greatest incentives reasonably possible, through the following mechanisms:

a) Trigen supports maximum APS percentages for CHP – either on a stand-alone basis or in the context of an aggressive APS percentage for the entire portfolio. Our recommendation is that the DOER set the APS such that the percentage of Massachusetts electric load met through CHP increases by at least 5% by 2020 over the percentage that existing CHP now comprises. Section 116 of the Green Communities Act states that it is the "commonwealth's goal to meet at least 20 per cent of the commonwealth's electric load by the year 2020 through new, renewable and alternative energy generation". As the RPS goal is targeted at 15% by 2020, it is arguable that the legislature intended the APS be designed to encourage no less than 5% new APS eligible generation by 2020.

b) In addition, the Department should ensure that other APS eligible resources do not monopolize the entire APS. Trigen advocates that no single APS resource be permitted to take up more than 50% of the APS portfolio.

c) Similarly, we would encourage the Department to set an Alternative Compliance Penalty at least as high as the level now set for the RPS.

d) Trigen encourages the Department to clarify that existing CHP facilities are eligible for the APS. However, this approach needs to be accomplished in a way that does not diminish the encouragement for new CHP facilities that lies at the heart of the legislative purpose: namely to lower carbon emissions going forward. For example, if existing facilities (including CHP) were to comprise 2% of current generation, to achieve Trigen's recommended APS target of 5% new APS facilities by 2020, the target APS % would need to be set at 7% by 2020. As a last point in this context, if the Department elects to allow only new CHP facilities to be eligible for the APS, or somehow creates a two tier approach to give greater rewards to new (vs. existing) CHP, Trigen believes it would be important to allow increased power generation at existing CHP facilities (in comparison to a prior historic baseline) to qualify as "new", similar to the current RPS Vintage Waiver rules.

e) Trigen further encourages the Department to explicitly acknowledge that "behind the meter" combined heat and power facilities are eligible for inclusion in the APS. To maximize the greatest amount of energy efficiency and the greatest GHG emission reductions from CHP, the Department should implement the APS in a way that encourages both large scale CHP facilities selling power at wholesale and those smaller "behind the meter" CHP facilities whose output will reduce retail purchases and thereby displace off site, centralized generation. In this context, DOER will need to include among its approved compliance options the ability for retail suppliers to evidence these contributions from "behind the meter" CHP generation, i.e., not limit the APS compliance method only to GIS-generated certificates. This would be similar to the approach taken by the DOER towards behind-the-meter renewable generation, which is independently verified for a participant by means other than the use of the NEPOOL GIS accounting system.

f) CHP facilities fueled by a renewable resource should be able to claim both RPS and APS credits. This reflects the multiple policy objectives they achieve: efficient use of fuel for both heating and electricity, diversification of fuels away from fossil fuels, and reduction of emissions, including carbon emissions. There is no basis in the statute to deny renewable-fueled CHP facilities their rightful claim to the rewards of providing these multiple societal benefits, for example, by requiring the owner of such a

facility to choose between one or the other of these two incentive programs.

4. Emissions Standards

A second area of focus concerns the new Section 11F ½ (b) of Chapter 25A of the M.G.L, which requires the Department, in consultation with the Department of Environmental Protection, to set: "(1) emission performance standards; and (2) a net carbon dioxide emissions..." for alternative energy generating sources. Given the statutory deadline of January 1, 2009, for the Department, to create the APS - and the absence of an explicit deadline for subsection (b) emission standards to be set - Trigen suggests that the Department and the DEP may not need to decide these complex emissions issues prior to January 1, 2009. However, if the Department desires to set an interim standard for subsection (b) by January 1, 2009, one approach that can be taken would build on the accepted fact that CHP facilities offer better energy efficiencies (and therefore lower comparable emissions) than stand alone electric generating and thermal facilities. One way to ensure that the "net carbon dioxide emissions rate" for CHP facilities is better than that of a "natural gas power plant…includ[ing] thermal delivery" is to require that the emissions from a CHP plant be equal to or lower than the combined emissions of the power and thermal plant outputs that it is displacing. This approach is called "double benchmarking" and has been utilized by some of the European Community countries in the context of Emissions Trading Schemes (see, e.g., the July, 2008, report from the International Energy Administration on "Combined Heat & Power and Emissions Trading: Options for Policy Makers" which is published at the following link: http://www.iea.org/textbase/papers/2008/chp_ets.pdf). Regardless of the Department's approach to the subsection (b) emissions standards, CHP eligibility for inclusion in the APS should not be delayed beyond the statutory January 1, 2009, deadline.

Thank you for the opportunity to submit these Comments. We look forward to working with the Department as these proceedings continue.

Very truly yours,

Lawrence W. Plitch
Vice President and General Counsel
Trigen, a Veolia Energy Company